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Nonoperative Management of Hip Osteoarthritis

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Berlin Family Medicine

Rotation Group 2, 2024

Dr. Brian Rodriguez



Larner College of Medicine

Problem Identification

- Among all adults the incidence of chronic hip pain is approximately 12 to 15%¹
- Chronic hip pain involves nociceptive and/or neuropathic pain and clinical management relies on the correct identification of the type of pain (somatic, neuropathic, or mixed type)²
- It is associated with impaired movement such as sitting and standing resulting in reduced functional outcomes and poorer quality of life³

Public Health Cost

- Previous studies have found that total 1-year preoperative costs of a total hip arthroplasty in Medicare Advantage patients is \$21,022,883 or \$512 per patient⁴
- This cost is grouped into office visits, imaging, joint injections, physical therapy, and pain medication
- In Berlin, patients have these costs as well as additional costs of extended duration of travel due to the rural geography and length of travel to necessary healthcare visits

Community Perspective

- Family Medicine physician Dr. Brian Rodriguez stated, “Patient compliance is a big hurdle. As much as people don’t want to have surgery, they don’t have the means or time or physical capacity to do a lot of the nonoperative management. Physical therapy being the most common and hardest to adhere to.”
- Community outreach coordinator and dietician Kate stated, “Chronic pain management does not have enough support and people don’t want to use heavy duty pain medication anymore. Access to better therapy that does not have a high cost for patients should be made a priority.”

Intervention and Methodology

- Recent guidelines on the management of hip osteoarthritis from the American Academy of Orthopedic Surgeons was reviewed in detail
- A concise handout with the posted recommendations for physicians and patients alike was generated to effectively deliver this information
- The handout will be printed and given to primary care offices in the Berlin area to begin increasing patient and physician access to the most recent recommendations for this extremely common problem

Results and Response Data

- The physician and patient handout was well received and outlined current best practices for chronic hip pain management
- Patients stated that they found it easy to understand



PHYSICAL THERAPY AS CONSERVATIVE TREATMENT

Physical therapy could be considered as a treatment for patients with mild to moderate symptomatic osteoarthritis of the hip to improve function and reduce pain.

⊙ Quality of Evidence: High

⊙ Strength of Recommendation: Moderate (Downgraded)

INTRAARTICULAR CORTICOSTEROID INJECTION
Intraarticular corticosteroids could be considered to improve function and reduce pain in the short-term for patients with symptomatic osteoarthritis of the hip.

⊙ Quality of Evidence: High

⊙ Strength of Recommendation: Moderate (Downgraded)



INTRAARTICULAR HYALURONIC ACID

Intraarticular hyaluronic acid should NOT be considered for treatment of symptomatic osteoarthritis of the hip as it does not improve function or reduce pain better than placebo.

⊙ Quality of Evidence: High

⊙ Strength of Recommendation: Strong

PHARMACOLOGICAL MANAGEMENT

NSAIDs when not contraindicated, oral nonsteroidal anti-inflammatories (NSAIDs) should be used to reduce pain and improve function in the treatment of symptomatic hip osteoarthritis.

⊙ Quality of Evidence: High

⊙ Strength of Recommendation: Strong



BMI: ADVERSE EVENTS

Limited evidence suggests that elevated BMI may increase the risk of adverse events in patients undergoing total hip arthroplasty for symptomatic hip osteoarthritis.

⊙ Quality of Evidence: Low

⊙ Strength of Recommendation: Limited

PRESCRIPTION OPIOID AS CONSERVATIVE TREATMENT

In the absence of sufficient evidence, it is the opinion of the workgroup that oral opioids should not be utilized for nonoperative treatment of symptomatic osteoarthritis of the hip.

⊙ Quality of Evidence: Consensus

⊙ Strength of Recommendation: Consensus



SOCIAL DETERMINANTS OF HEALTH

Limited evidence suggests that social determinants of health (e.g., education, income level, food desert, insurance type) may negatively impact length of stay, total cost of care, and mortality after total hip arthroplasty.

⊙ Quality of Evidence: Low

⊙ Strength of Recommendation: Limited

PHARMACOLOGICAL MANAGEMENT: ACETAMINOPHEN

In the absence of sufficient evidence, workgroup's opinion is that when not contraindicated, oral acetaminophen may be considered to improve pain and function in the treatment of symptomatic osteoarthritis of the hip.

⊙ Quality of Evidence: Consensus

⊙ Strength of Recommendation: Consensus



Evaluation of Intervention and Limitations

- The intervention filled a need for physician and patient information regarding the changing landscape of chronic hip pain recommendations
- The handout communicates peer reviewed guidelines set by the AAOS in a way digestible to patients
- Limitations of the study is that it does not address psychosocial aspects of chronic pain and focuses specifically on conservative management of pain in the hip joint

Future Interventions

- Future interventions may best serve patients experiencing chronic hip pain by providing specific home exercises recommended by physical therapists
- Additionally including a nutritional pamphlet to increase patient understanding of how weight loss decreases joint reaction force (force generated within a joint in response to forces acting on the joint) may motivate patients to lose weight as a method of conservative management

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